

### The watershed: a factor in coronary vein graft occlusion

Sir,

It was with some interest that we read the article by Dr. Simon Rees published in *British Heart Journal* (1976) **38**, 197-200. The suggestion offered by Dr. Rees that, because grafts to totally occluded arteries have a high patency rate, ligation of the coronary artery proximal to the anastomosis may be necessary to achieve the highest patency rate has not been borne out by our experience. As we feel that ligation may indeed be harmful, we would appreciate the opportunity to report our own results. This experience has been reported recently by us in an article entitled 'Patterns of patency of 596 vein grafts up to 7 years after aortocoronary bypass'. *Journal of Thoracic and Cardiovascular Surgery* (1977), **73**, 443.

In summary, we examined 596 vein grafts in 343 patients at a mean follow-up of 15.4 months. Overall graft patency was 84 per cent. Only 130 patients with 96 grafts were asymptomatic at the time of restudy and their graft patency was 91 per cent (178/196). Of the overall group of grafts, 95 had been attached to the distal segment of a totally occluded vessel and 78 were patent for a patency rate of 82 per cent. Our conclusion, therefore, was that graft patency was not significantly influenced by the presence of competitive flow. Indeed it has been our aim wherever possible to obtain bidirectional flow from the graft and this was achieved in 80 per cent of the grafts which were performed in this series.

It is not clear to us from the results presented why the results of the study of Dr. Rees should differ from ours, but we feel strongly that the suggestion that coronary arteries should be ligated proximally is incorrect and for this reason feel it important that our results be made known at this time.

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This letter was shown to Dr. Rees who comments as follows:

Sir,

The results of Lawrie *et al.* obviously suggest that graft occlusion is multifactorial, but I do not agree that the watershed has been shown not to be operative. Other factors nevertheless are obviously important including mainly the flow, and indeed the size of the grafted artery as quoted in my article.

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